

A Research for Identifying Study Anxiety Sources among University Students

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Abstract

University students suffer to some levels of study anxiety, such as; have new experiences, environment and situation. Study anxiety is a real phenomenon. Campus environment has universal access to increase study anxiety among students. The prevalence of study anxiety has been acknowledged by students and educators. However, no current research exists to identify the study anxiety sources among university students. In this research, we present a survey aimed to identify of study anxiety sources among university students. The survey involves 770 students of Universiti Malaysia Pahang. The survey asks students about experiences, feelings and thoughts related with anxieties during study process. The results identify seven sources. But, there are five potential sources of study anxiety; exam anxiety, class presentation anxiety, mathematic anxiety, language anxiety and social anxiety. Descriptive statistics were used to analyze the data which was run in SPSS 16.0. The results will be used to address study anxiety sources among university students.

Keywords: Study anxiety sources, University students, Academic performance

1. Introduction

University students have a great deal to create anxiety, especially in study process. These are like difficulty of subjects, new roommates, identity crises, cultural shock, and relationship problems in increase the anxiety. Anxiety disorders are rising among students (Leta, 2001). But keep feeling anxiety could be interrupt students' performance. Individuals in high anxiety levels have experience symptom age during university years. Researchers found that many obstacles of anxiety while study processes such exam anxiety, mathematic anxiety, language anxiety, social anxiety, family anxiety and library anxiety. Anxiety while study is a major predictor of academic performance (McCraty, 2007; McCraty, Dana, Mike, Pam and Stephen, 2000) and various studies have demonstrated that it has a detrimental effect.

Researchers have looking at the correlation of anxiety sources and the effect of students' academic performance, in term, students' high level of anxiety achieved low academic performance (Luigi, Francesca, Maria, Eleonora, Valentina and Benedetto, 2007; McCraty, 2007).

High level of anxiety also interferes with concentration and memory, which are critical for academic success. However, most of students would lack the concentration of study because of exam anxiety, social anxiety, mathematic anxiety, and many anxiety sources. Feeling discomfort and anxious in the classroom does not enhance learning of any kind. The anxiety's psychological symptoms among students include feeling nervous before a study class, panicking, going blank during a test, feeling helpless while doing assignments, or lack of interest of subjects difficult whereas the physiological symptoms include sweaty palms, racing heartbeat, or an upset stomach.

Anxiety is a psychological and physical response to treat a self-concept characterized by subjective, consciously perceived feelings of tension (Spielberger, 1983). Anxious students have experience of cognitive deficits like misapprehension of information or blocking of memory and recall. Spielberger reported two forms of anxiety: state anxiety – a response to a particular stimulation or set of circumstances, and trait anxiety – an intrinsic characteristic of the person. Previous anxiety research suggests that there are roughly two types that can be experienced at different psychological levels (Spielberger, 1966). Hancock concludes that students with high level anxiety show significantly less motivation in classrooms perceived as highly evaluative compared to students with low level anxiety (Hancock, 2001).

Study anxiety is not only due to the lack of study motivation or to insufficient skills, but is also due to misperception about courses and negative experiences in previous study classes. High level anxiety is more closely associated with lowered performance in low-ability students than in high-ability counterparts (Hembree, 1998). At the global level, anxiety is viewed as a permanent trait, as some people are predisposed to be anxious. Previous studies found regarding anxiety disorders among students such exam anxiety, but no studies about potential sources of study anxiety among university student. Generally, study anxiety aimed individual perceive any anxiety symptoms because of difficult situation while study process. The study aimed to identify of study anxiety sources among university students.

The prevalence of study anxiety has been acknowledged by students and educators. In this paper, we present a survey aimed to identify of study anxiety sources among university students. In this survey, 770 Universiti Malaysia Pahang's students are involved and asked about experiences, feels, and thoughts of anxiety during study process. The results identify seven sources. But, there are five potential sources of study anxiety; exam anxiety, class presentation anxiety, mathematic anxiety, language anxiety and social anxiety. Descriptive statistic used to analyze the data which was run in SPSS 16.0.

The rest of this paper is organized as follows. Section 2 describes the concept of study anxiety and its sources. Section 3 describes the survey's method. Section 4 describes result and discussion. The conclusion of this work is described in section 5.

2. Preliminaries

2.1 Concept of study anxiety

Previous studies found that anxiety affected on students' academic performance. The concept is adopted from general term of anxiety and tried to apply in educational area, mean that to gain the possibility of anxiety among students during study. According to Sarason in Haris and Coy (2003) that anxiety is a basic human emotion consisting of fear and uncertainty that typically appears when an individual perceives an event as being a threat to the ego or self esteem. Spielberger theory of anxiety defined that anxiety as an emotional state consisting of feeling, tension, apprehension, nervousness, and worry with activation or arousal of the autonomic nervous system, these are differentiated as state and trait anxiety (Spielberger, 1966). In the conceptualization, individuals with high levels of anxiety generally hold heightened levels of trait anxiety, but in evaluative situations, the state anxiety also elevates.

Academic performance is the highlight as a critical issue in the university. Research found indicated that psychophysiology difficulties produce in turn affect the performance of students academically (McCraty, 2007), and also poor academic performance as defined by diagnosis of learning disability or multiple filed on academic subjects. Feeling anxious in the classroom did not enhance learning of any sites. Mostly students did not have awareness of study anxiety disorders. The concept of study anxiety showed in Figure 1, study anxiety is feelings, thoughts, and experiences created anxiety level during study process and affected on students' academic performance. Students' felt anxious while study process may because not understanding the subject or have

problems interrupted their performance on study. The anxiety created by study anxiety sources, these are explained below.

<<INSERT FIGURE 1>>

2.2 The Study Anxiety Sources

The study anxiety is situation that refers to anxiety condition during study in term of the perception that high level anxiety relate to obtain of low academic performance. The sources can create as well increased students' anxiety levels while study process, its make students have bad experience then they will keep the experience for next situations. Such anxiety can interfere with students' performance on exam (Harris and Coy, 2003; McCraty, 2003). According to Spielberger in Sansgiry and Kaviat (2006) found that exam anxiety as a situation-specific trait that refers to the anxiety states and worry conditions that are experienced during examinations. Too much anxiety can interrupt exam performance, researchers have been investigated that exam anxiety mostly to negative effect on academic performance (Sansgiry and Kavita, 2006). High degree of anxiety can block thoughts, create negative frame in mind, and potential of poor exam performance. Researcher report that student who is not well prepared for exam may have higher levels of task interfering worry during examination than those are better prepared (Pecarora, 2006).

Language is one of study anxiety sources, therefore language have an effect on students' academic performance. According to Worde, half of students examined reported experiencing debilitating levels of language anxiety (Ying, 2008). Function of language is to communicate with other people, so language is like crucial role as communication medium. According to MacIntyre in Ying (2008) observed that language anxiety is a form of situation-specific anxiety experienced in particular foreign language context (Ying, 2008). Similarly, conceptualized of foreign language anxiety as a distinct complex of self perceptions, beliefs, feelings, and behaviour related of classroom language learning. Language anxiety is caused by personal and interpersonal, learner beliefs about language learning, teacher belief about language anxiety, teacher-learner interactions, classroom procedures and language testing (Ying, 2008). The previous study showed that low anxiety students perform better than high anxiety students on foreign language class. Students who have high level anxiety made different types of grammatical errors, difficult speeches, or personal interaction in foreign language than low level anxiety.

Mathematic is also source of study anxiety among students, anxiety response to mathematics is a significant concern in terms of the perception that high anxiety will relate to avoidance of math tasks (Anderson, 2007). Mathematic anxiety is lack of ability for an intelligent person to cope with quantification, confronted with a math problem. The prior study report that low mathematic achievement significantly related to later high level anxiety, but prior high math anxiety hardly related to low math achievement (Ma and Qu, 2004). Previous study investigated that mathematic anxiety as one of the effect lowered achievement. The main characteristic discomfort of mathematics include dislike, worry, and fear with specific behavioural manifestation such as tension, frustration, distress, helpless, and mental disorganization (Ma and Qu, 2004). Most of the students have problems with math anxiety, result finding that students have high math anxiety. Poor mathematic performance is best explained of mathematic anxiety, means' that students' strong mathematic background should be less anxious than a weak mathematic background.

Symptoms of social anxiety often vary among students (Cooley, 2007). The effect of social life is important issue in study anxiety, such as difficult relationship with roommate, problem with peers, and uncomfortable in hostel. Social anxiety will negatively influenced an individual behaviour both of cognitive and affective. Kimberley (2007) conceptualized four approaches to understanding social anxiety. The first, skill deficit model, social anxiety is the result of an individual lacking the skills to handle situations perceived to be threatening. The second, cognitive – self model, that social anxiety is not a lack of skills but perception of personal inadequacy. The third, classical conditioning model, social anxiety is conditioned when neutral stimulus associated with negative social experiences. Lastly, personality trait model, social anxiousness is a trait rather than reaction. University students described the situations that caused them to feel shy, people who feel social anxious are often quiet, inhibited, and withdrawn (Mark and Robin, 1997). Calming and relaxation technique can help student manage anxiety. The technique use to help student will overcome in part of social anxiety and given class situation (Cooley, 2007).

Other sources as assumption in study anxiety, family factors are contribute to develop of anxiety disorders among students such as children of parents with anxiety disorders have an elevated rate of anxiety disorders (Susan and Margareth, 2006). Individuals with separation anxiety disorders tend to come from families such

when suddenly faced with the prospect of spending time away from home. These cases are like parents divorce, problems in family, childhood experiences, and low appreciate of students' achievement.

Presentation anxiety is aimed student take class presentation, research shown that anxiety has significant negative effects on an individual's communication. Anxiety associated with giving presentation is an issue that presents in university based setting with reasonable frequency. Performing in front of a group, other students, colleagues and lecturers is a difficult part of the student experience and speaking in public can unsettle or even frighten some students. Presentation is considered to be of paramount importance to students, but Horwitz in Murugesan (2005) cited that anxious among students can avoid studying and some cases skip classes entirely. According of Krannich in Brenda and Tillson (2007) that the fear of delivering a speech or presentation ranks as the number one fear among most people, including students. Bishop in Elliot and Joyce (2005) reported that 35% of the students surveyed identified of public speaking anxiety. The high level of presentation anxiety has impact on students' performance. A survey report that students required class presentation as an evaluated part of students' academic course. Murugesan (2005) suggested avoiding presentation anxiety by practical ones like adequate preparation and practice.

Last study anxiety sources is library anxiety, every student is required to use the library at some point in study. The term library anxiety was first used by Mellon in 1986, to describe the sense of fear and anxiety among students (Goliath, 2007). Library anxiety represent as negative experiences among university students, the previous study reported that between 75% till 85% of undergraduate students experience uncomfortable levels of library anxiety (Qun and Anthony, 2002). Theory of library anxiety proposes that when students are confronted with the need to gather information in the library, many become so anxious that students are unable to approach the problem logically and effectively. Further, compared to low anxious student, high anxious students often have low self perception about students' ability to use effectively the library in general.

3. Method

3.1 Respondents

The respondents are 770 students, consist of 395 males and 375 females. The respondents are first year on second semester degree undergraduate students in five engineering faculties at Universiti Malaysia Pahang. The specification of respondents, mean that to categorize the respondent into one classification such year of level, undergraduate students, and engineering students. Actually, the survey is a first step to identify the study anxiety sources before conducted the experiment. Therefore, the respondent should be match between survey and experiment.

3.2 Material

Study anxiety questionnaire as developed based on previous study about students' anxiety as stated in sub-section 2.2. The questionnaire contains forty items, each of item has five scale that ask respondents to answer of questions base on student experiences, feeling, and thought about anxiety felt along study in campus. The scale format uses answering ranging from 1 being an answer of never, 2 for an answer almost never, 3 for an answer rare, 4 for an answer fairly often and 5 being an answer of very often. To analysis the data, for distribution of study anxiety scores, it follows Likert-scale, i.e., 1 means weak; 2 means moderate; and, 3 means strength. The highest of mean score is the most potential sources. In this survey, the study anxiety questionnaire has been test for reliability with alpha score yielded 0.934 and accessing content validity. The questionnaire is only to identify study anxiety sources, independent of other subject can used the questionnaire like sophomore, final year students or high school students.

3.3 Demographic

The questionnaire ask students about their feeling, experiences and thought related with several anxiety as follows; exam, language, mathematic, social, family, presentation, and library anxieties.

The questionnaire also asked students about gender and faculty. The name, age and race of respondent are not needed in the questionnaire because of race was explored in part of questions about social anxiety.

3.4 Procedure

The survey is conducted before start class and the inspector attending the class, more less 30 minutes is required to complete the survey for each class. Respondents in the survey are completely voluntary. Firstly, the students must read and answer the question, the inspector will guide students to answer the questions. Student answers the question with possible sources of study anxiety which related with their academic performance. Based n the

observation along conducted the survey, majority students have no awareness about the study anxiety before the survey.

4. Result and Discussion

Descriptive statistics is used to find out the Mean (M) and Standard Deviation (SD) to identify the five potential sources of study anxiety. The results show that

- 1) Exam anxiety is a leading source with $M=1870.29$ and $SD=99.52$. The students fell and have experience about anxiety while take an exam. The highest score of this source is question 1 “How often you feel anxious on the examination due to the lack of preparation”. Students indicate that lack of exam preparation, in term not enough study is creating anxiety during exam.
- 2) The second source is Presentation anxiety with $M=1715.20$ and $SD=108.99$. The highest score for presentation is question 32 “How often you felt that your heart beating very fast while making class presentation”. Heart beating very fast is one of the anxiety symptoms, students also report have this symptom while taking class presentation.
- 3) The third source is Mathematic anxiety with $M=1694$ and $SD=152.49$. The highest score for mathematic is question 16 “How often you feel anxious when you could not understand the mathematic subject”. Mathematic is one of the difficult subject, student feel anxiety while do not understand the subject.
- 4) The fourth source is Language anxiety with $M=1672.20$ and $SD=90.67$. Foreign language is potential to increase this anxiety. The highest score for language is question 12 “How often you feel anxious because of lack confidence while taking language class”. Student perception language class can increase anxiety because lack of confidence.
- 5) The last source is Social anxiety with $M=1463.43$ and $SD=97.34$. The highest score for social is question 24 “How often you face any difficulty of study when there are many members in a room”. The number of roommates is a student’s problem in social anxiety, student feel difficult to study.

<<INSERT TABLE 1>>

For family and library anxieties, both of the sources have low scores, in other word that these are not probable sources to create study anxiety among students. The results are presented in Table 1 and Figure 1.

For difference perceives about study anxiety sources between male and female, the result can be found in Table 2.

<<INSERT TABLE 2>>

Male were more anxious than female on exam, social and using library. Females were more anxious in language, mathematic, family and presentation.

5. Conclusion

University students suffer to some levels of study anxiety. Base on the previous studies, researchers found that many sources of anxiety among students such mathematic anxiety, language anxiety, family anxiety, library anxiety, exam anxiety, presentation anxiety, and social anxiety. Student cannot perform well if they are having a problem regarding anxiety. Campus environment as part of social anxiety has universal access to increase study anxiety among students. The prevalence of study anxiety has been acknowledged by students and educators. However, no current researches exist to identify the study anxiety sources among university students. In this paper, we present a survey aimed to identify of study anxiety sources among university students. The survey involves 770 students of Universiti Malaysia Pahang. The respondents have answered the survey questionnaire about experiences, feeling and thoughts related with anxieties during study process. The results, we have identified the five potential of study anxiety sources among university students. Subsequently, they are; exam, presentation, mathematic, language, and social anxiety. Based on the results, for further research, we will design intervention and conduct a treatment to reduce anxiety in improving student’s academic performance.

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Table 1. Study Anxiety Sources

Study of Anxiety Source	Mean	Standard Deviation
Exam	1870.29	99.52
Presentation	1715.20	108.99
Mathematic	1694.00	152.49
Language	1672.20	90.67
Social	1463.43	97.34
Library	1437.80	77.83
Family	1406.40	149.62

Table2. The study anxiety sources based on gender

Study Anxiety Sources	Mean	
	Male	Female
Exam	1875.17	1841
Presentation	1707.50	1746
Mathematic	1677.75	1759
Language	1650.75	1758
Social	1469.50	1459
Library	1432.20	1387
Family	1396	1448

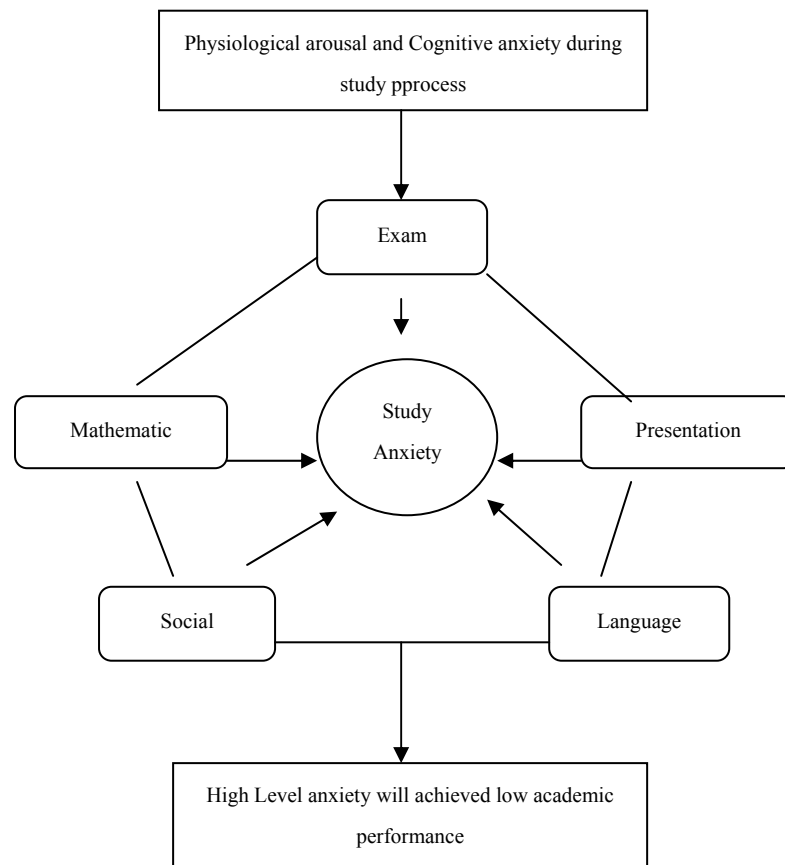


Figure 1. Concept of Study Anxiety

Appendix

Dear participants,

This survey means to identify study anxiety sources and ask you to fill the questionnaire base on your feelings, experiences, and thoughts regarding anxiety during your study process. For each question choose one of the following alternatives. Please answer the questions as truthfully as possible.

Gender :

Faculty :

Alternative question:

1= never

2 = almost never

3 = rare

4 = fairly often

5 = very often

No	Questions	1	2	3	4	5
1	I feel anxious during exam due to the lack of preparation					
2	I feel depressed after taking an exam					
3	I felt lost your concentration during exam					
4	I felt tense during study for exam					
5	I felt anxious that you could not understand of exam's question					
6	I felt your heart beating very fast during important exam					
7	I have feel experienced about anxiety when you take surprise test					
8	I felt anxiety during attending foreign language class					
9	I felt anxiety when speaking activities in a language class					
10	I felt nervousness when my lecturer interrupting to correct my speaking					
11	I feel ever thought that my language's lecturer are like native speaker in the classroom					
12	I feel anxious because of lack confidence during language class					
13	I feel anxiety because for me mathematic is difficult subject					
14	I feel study hard but not success yet in the mathematic subject					
15	I always writing down everything during mathematic class					
16	I feel anxious when I could not understand the mathematic subject					
17	I have lose of interest with mathematic					
18	I have face problems with my peers					
19	I feel that stay in hostel is uncomfortable to study					
20	I ever faced any difficulties of study due to the problem with my roommate					
21	I feel home sick during study in campus					
22	I find that campus environment uncomfortable to study					
23	I ever felt racial diversity during study					
24	I ever face any difficulties of study when there are to many roommates					
25	I feel that insufficient family income will affect on my academic performance					
26	I find that my childhood experiences make me feel anxious					
27	I felt anxious that many members in your family will affect of my study					
28	I ever felt anxious when my parents disappointed with my academic performance					
29	I often felt anxiety about problems in my family					
30	I often feel anxious when giving class presentation					
31	I felt lack of confidence during my presentation					
32	I felt that my heart beating very fast during presentation					
33	I have experience being tongue tied in my presentation					
34	I find that class presentation has low contribution of my study					
35	I feel anxious when does not know to use the library					
36	I feel anxiety that the reference librarian are unhelpful					
37	I ever anxious when trying to find references in the library					
38	I feel uncomfortable when using the library for study					
39	I feel the library not an important part of my study					
40	I feel anxiety when the library staff are reluctant to help me					

Thanks for your participation